



Angus Council

Major Accident Hazard Pipelines Emergency Response Plan



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Section 1

General Introduction

Introduction

1.1 Although pipelines are often considered a safer mode of transportation than transporting goods by road or rail, a broken pipeline or accidental release can have serious consequences for people and the environment.

In order to regulate Major Accident Hazard Pipelines (MAHP) carrying dangerous fluids or gas, which have the potential to cause major accidents, the UK Government has enacted the [Pipeline Safety Regulations 1996](#) to protect public health and safety. The [Health and Safety Executive](#) (HSE) is responsible for notifying local authorities of MAHP pipelines in their area.

To prevent major accidents involving hazard pipelines and to minimise the consequences in the event of an emergency, MAHP regulations and guidance aim to:

- Identify the measures and arrangements necessary to contain and control an incident in order to minimise its effects,
- Outline arrangements to restore and clean up the environment, and
- Provide details on methods of communication in order to provide prompt and appropriate information.

For more information relating to MAHP Regulations visit the websites of the [HSE](#), or [National Grid UK](#).

Aim

1.2 The aim of this plan is to detail the actions necessary to minimise the consequences to the health and safety of the community in the event of an emergency involving a Major Accident Hazard Pipeline (MAHP).

Plan Objectives

1.3 The aim will be achieved through the following detail:

- The nature & consequences of the hazards

- Safety advice for first responders
- Activation & notification arrangements
- Multi-agency roles & responsibilities
- Public information & media arrangements
- Pipeline specific route mapping & details.

Scope of the Regulations

1.4 The regulations apply to new or existing onshore and offshore pipelines and all parts of MAHP. Terminals and sites used for storage (e.g. gas holder stations) are not part of the "pipeline" as defined in the Regulations, and have their own specific emergency arrangements. Pipelines conveying air, water, water vapour, and steam are not included within the scope of the regulations.

The regulations will apply to any pipeline operator in Angus or Duty Holder (as defined under Regulation 2 of the Pipelines Act 1962) which includes the following;

- **BP** oil pipeline, Cruden Bay to Grangemouth Refinery
- **National Grid** from St. Fergus to Bathgate and Bishop Auckland
- **Shell EXPO NGL** pipeline, St. Fergus to Mossmorron.

Descriptions of the dangerous fluids conveyed in pipelines are listed in Schedule III of the regulations. This list closely reflects the fluids currently notifiable under the Notification of Installations Handling Hazardous Substances Regulations 1982 (as amended) (NIHHS). The Pipeline Safety Regulations specifically require that local authorities develop and maintain an Emergency Response Plan. This plan does not extend to cover any of the following (these would be addressed via the council's recovery plan);

- Environmental consequences
- Economic consequences
- Loss of gas supply to customers.

Section 1 General Introduction

Supporting Emergency Plans

- 1.5 Local responders maintain a number of plans, which may also be activated in support, including:
- The council's generic emergency plan which details the activation, command & control arrangements for mobilising local authority and multi agency support including the voluntary sector.
 - Tayside Strategic Co-ordinating Group (SCG) Emergency Response Plan, including mass fatalities; in the event of multiple fatalities, the mass fatalities plan may be activated at the request of the Procurator Fiscal.
 - Tayside SCG Media Plan; to ensure a co-ordinated approach to the media, the SCG Media Plan may be activated to warn and inform the public.
 - Operators Major Incident Emergency Procedures.

Angus Council and the relevant duty holder will liaise closely to ensure that the emergency procedures of the pipeline operating company which are required under the regulations along with the local authority's emergency plan are dovetailed in order to provide a comprehensive and effective response to emergencies.

Emergency Planning Timescale

- 1.8 The regulations impose a duty on Angus Council within 18 months of receiving a notification from the Health and Safety Executive to prepare a plan detailing how emergencies relating to the pipeline will be dealt with.

Definition of a Pipeline

- 1.6 For the purposes of emergency planning the definition refers to;

A pipeline in which a dangerous fluid is being or is to be conveyed with major hazard potential including the apparatus and works associated with the pipeline and it is not related to, nor limited by, the substances conveyed.

However, the definition of a pipeline does not include drains and sewers. (The precise meanings of pipelines are contained in Regulation 3 of the Pipeline Safety Regulations).

Interface with other Local Authority Plans

- 1.9 The Council Pipeline Emergency Plan interfaces with the contingency plans for dealing with pipeline emergencies for the following local authorities:

- Fife
- Grampian
- Perth and Kinross

Consultation

- 1.10 Angus Council has consulted with the emergency services, health board, pipeline owners, the health & safety executive, Scottish Government, Scottish Environmental Protection Agency (SEPA) and Scottish Water, along with adjoining local authority areas.

Purpose of the Plan

- 1.7 This plan is designed to co-ordinate the actions of those involved in the response to an emergency involving a pipeline. The detail and scope of the emergency may vary according to the pipeline, its location and the substance conveyed.



Section 1

General Introduction

Access to Information for Plan Development

1.11 Full liaison and effective communication will be maintained between Angus Council and the duty holder. The local authority requires information from the pipeline owner to enable it to draw up the emergency plan. The regulations state, before the construction of any pipeline within or through its administrative area is commenced, Angus Council shall:

- (a) be notified that it is to be constructed
- (b) be furnished with such information as it may reasonably require which is likely to assist in preparing the emergency plan.

Similarly, the pipeline owners require information from Angus Council to assist in the preparation of their pipeline emergency procedures. This should ensure that the contingency arrangements of both organisations should dovetail.

Information in the Event of an Emergency

1.12 Unlike major industrial sites which are restricted almost all pipeline routes are open to the public. Restrictions are however in place for block valves sites, pumping stations and other above ground installations.

In the event of an emergency involving a major accident hazard pipeline, prompt and appropriate information will have to be provided to those affected by the emergency.

The emergency services and pipeline operators have agreed in advance who has the authority to activate any public warning and under what circumstances.

Categories of Information

1.13 Pipeline owners are required to provide information to Angus Council about the type and consequences of possible major accidents/ emergencies and the likely effects.

Information must also be supplied on the pipeline route, the fluid conveyed and the operating conditions, location of cut-off valves and the emergency control arrangements.

Validation of Plan

1.14 The plan shall be validated, by testing the emergency response arrangements annually for at least one pipeline route within Angus. The plan does not require to be tested in full but may only involve a tabletop exercise or other simulation.

A full-scale exercise involving live play will be held as necessary in line with other exercise requirements. The minimum interval will be every three years.

Monitoring, Review and Audit

1.15 The emergency plan has been prepared and will be kept up to date by the Civil Contingencies Team (reviewed annually) to reflect changes in risk, procedures and personnel.

The plan will be updated more frequently should significant changes arise.



SECTION 2

NATURE OF HAZARDS



Section 2 Nature of Hazards

Hazards

2.1 When a high-pressure gas pipeline fails, the immediate and rapid depressurisation is followed, typically within the first 30-50 seconds, by a relatively stable flow as the pipeline unpacks due to the leak and the continued pumping of gas into the pipeline. As a result there may be different scenarios and sequence of events including;

- Lighter than air and heavier than air releases
- Immediate ignition of the escaping fluid.
- Delayed local ignition, delayed remote ignition.
- No ignition at all.
- Gas vapour cloud migration.
- Thermal radiation effects on people and buildings.

Each of the above will produce different hazards and potential risk, consequences, hazard ranges and durations. Further information can be found in the pipeline owners Major Incident Emergency Procedures.

2.2 The duration of a pipeline release will depend on a number of factors, including the size of the failure, pipeline pressure, the pipeline diameter and distance to nearest isolation valves. It should be assumed that the gas release could potentially continue for some time and, in some cases, it may be a number of days before the gas leak is isolated and the hazard completely removed.

With Ignition

2.3 In its natural state, natural gas is colourless, odourless and lighter than air, and tends to disperse easily into the atmosphere as a vertical jet, unless confined by structures. Whilst in the National Transmission System (NTS) Natural Gas is **odourless**; the odour is artificially

added. at the NTS Off-takes, when gas is transferred to the Local Distribution Zone (LDZ) to make detection easier for the public.

Any natural gas release carries the risk of ignition, but in the majority of cases ignition does not occur.

Live crude oil is extremely flammable (low flash point) toxic, and heavier than air and may travel to remote sources of ignition (e.g. along drainage systems, in basements etc). A pool of oil will form with highly flammable gas vapours and a gas cloud. If ignited, an oil pool fire with lethal heat radiation levels will occur. Any gas vapour cloud formed will move downwind of the oil pool. There will be an accumulation of vapours in low-lying areas and confined spaces.

Light oil condensate is a colourless non toxic liquid that will form a nearly odourless heavier-than-air gas around the incident site. If ignited in the case of a major fracture there will be considerable noise, a plume of black smoke. Radiated heat and burning liquid may cause fires some distance from the point of damage.

Measures must therefore be taken to ensure that potential ignition sources, which might include vehicles, communications equipment and machinery, are not introduced into the area around the release where gas/liquids could potentially be present in flammable concentrations.

Without Ignition

2.4 If a release of gas, live crude oil or condensate does not ignite immediately it will be accompanied by considerable noise and, depending upon the pressure, by the formation and dispersal of gas clouds influenced by wind conditions. The only danger of an explosion is if the gas ignites when it has been mixed with air in the right

Section 2 Nature of Hazards

proportion and is in a confined space. A confined space could be in a natural hollow, valley, clumps of trees, or dense undergrowth. The resulting explosion would be concentrated with high force.

Natural Gas Liquids (NGL) are non toxic and heavier than air and will settle in low areas or run down burns and streams in light wind conditions.

Any leaks in the pipeline will be accompanied by a hissing or roaring sound and may cause the ground in the vicinity to freeze. Initially the mixture may be released as a liquid which could then evaporate to give a vapour and droplet mixture which could result in the formation of a gas cloud. This gas cloud would have an initial temperature of approximately minus 65°C which would freeze atmospheric moisture at the periphery.

Light oil condensate is a colourless non toxic liquid that will form nearly odourless heavier than air gas settling in low areas around the incident. This gas is an anaesthetic and asphyxiant and in sufficient quantities will eliminate oxygen. If un-ignited it will be accompanied by noise and a fountain of liquid which will form pools of light oil around the area and could cause water pollution and fire hazards if allowed to run into burns and rivers.

In the event of an un-ignited pipeline failure, unless otherwise advised by the pipeline operator, safe distances should be based on the maximum thermal hazard range for the individual pipeline.

Flammable Gas Cloud

2.5 It is difficult to predict the extent of a flammable gas cloud, as it is dependent on release pressure, size, orientation, time and atmospheric conditions.

If a cloud is ignited it may burn as a flash fireback to the point of failure. If a release is ignited immediately it may burn as a jet flame or pool fire.

Vapour cloud explosions, following a massive release of volatile fluid or a **boiling liquid expanding vapour explosion (BLEVE)** are low probability, severe consequence events which may occur with certain fluids under certain conditions.

Impact Distances

2.6 Two categories of hazard range are provided for emergency management purposes; emergency planning distance & maximum thermal hazard range. These distances are individually applied for the specific MAHPs.

Emergency Planning Distance (EPD)

2.6.1 The emergency planning distance is the distance where a detailed emergency plan has to be prepared to address the worst **credible** risk, and acts as the baseline plan. However responders must also take account of the maximum thermal hazard range.

Maximum Thermal Hazard Range

2.6.2 The maximum thermal hazard range is the maximum distance from the pipeline within which the population **could potentially** suffer harm in the event of a MAHP Emergency. It is individually derived for each pipeline based on local vulnerabilities and the potential worst-case scenario. The thermal hazard range does not consider the likelihood of an emergency occurring and is inappropriate for detailed emergency planning, however Category 1 responders must be aware of the maximum potential impact and prepared to extend the emergency response as the individual situation warrants.

Section 2 Nature of Hazards

Dynamic Risk Assessment

2.7 Emergency services will need to consider both the emergency planning distance and, maximum thermal hazard range when deciding evacuation procedures and cordons. If emergency control rendezvous points are to be established it is suggested initially that it is located at a distance double the maximum thermal hazard range; this may be amended when the pipeline operator has conducted a dynamic risk assessment.

Detailed Hazards

2.8 The following provides a brief description of specific hazards.

Thermal Radiation

2.8.1 Ruptures which ignite will normally result in an initial burst of high thermal radiation lasting about 30 seconds. Over the next 15 mins the radiation levels will drop substantially and remain steady until the gas is switched off. Most of the harmful effects of direct radiation from this type of failure will be felt in the first 15 minutes after ignition.

Unimpeded leaks will normally result in steady radiation levels, with similar behaviour to a flare stack, affecting a small area. Impeded leaks will behave similar to a rupture. Due to the likely size of hole involved in gas release, the area affected (even by impeded leaks) will be very small compared to ruptures.

Debris Throw

2.8.2 Experience shows that most of the debris ejected as a result of pipeline failure will fall within 20-80 metres dependent upon the size of the pipeline. Although damage can be expected from the impact the the likelihood of casualties will, be small in comparison to thermal radiation.

Noise

2.8.3 Gas will be released at sonic velocity (approximately 340 metres/second) until it is almost exhausted from the pipeline and will generate substantial noise levels audible over significant distances. However, the distance to which the surrounding population will have hearing damage requiring some treatment will be limited. Any damage is likely to be temporary.

Responders must be made aware that standard issue hearing protection may not afford adequate protection.

Overpressure

2.8.4 Decompression of a pipeline will produce an overpressure in the atmosphere. This overpressure is not expected to exceed 0.58psi, but will continue until the release is sealed or the contents of the pipeline vented. In an open situation a high degree of window breakage would be likely, but little structural damage.

Vulnerable Pipeline Locations

2.8.5 Additional design and operational precautions are taken on the pipeline network at potentially vulnerable locations, such as road or rail crossings, to reduce the likelihood of pipeline failure at these places.

Vulnerable People

2.8.6 As part of generic emergency planning under the Civil Contingencies Act 2004, arrangements should be in place to identify potentially vulnerable people in the community. Contact and owner/ occupier information is maintained by pipeline owners.

Section 2 Nature of Hazards

Asphyxiation

- 2.8.7 The release of large amounts of gas or vapours (even non-toxic substances) at high concentrations could cause asphyxiation due to the exclusion of oxygen. However these conditions may only exist in close proximity to the point of failure.

Pollution

- 2.8.8 As a result of any accident/incident, varying degrees of pollution may occur and an assessment of the environmental health aspects will be required, e.g. air pollution, land contamination, threat to wildlife etc.

In any situation where pollution could affect a watercourse, either directly or through surface drains, Scottish Water, Scottish Environmental Protection Agency (SEPA) and others, where appropriate, must be notified so they can take the necessary action.

Such pollution could be the primary factor-giving rise to the occurrence or it could be secondary effect of the emergency incident, e.g. chemicals entering into the water directly from fire fighting operations.

Note: THE PIPELINE SAFETY REGULATIONS 1996 ONLY COVER ISSUES RELATING TO HEALTH AND SAFETY OF PEOPLE. THEY DO NOT INCLUDE ENVIRONMENTAL, ECONOMIC AND 'QUALITY OF LIFE' ISSUES WHICH ALTHOUGH EXCLUDED FROM THE REGULATIONS ARE STILL COVERED.



SECTION 3

Plan Activation



Section 3 Plan Activation

General

3.1 This plan will be activated when it becomes known that a gas operators pipeline has failed, or is likely to fail, to a degree that warrants the activation and implementation of the relevant operators emergency plan for Major Accident Hazard Pipelines. In this context 'plan activation' means the implementation of the contingency arrangements outlined in this document and supporting gas pipeline operator documents. Such action will be undertaken in a manner that will ensure the prompt notification and involvement of all the relevant agencies, including emergency services, local authorities, pipeline operators, and the utilities.

Activation

3.2 For a slow release/leak it is likely that the gas pipeline operator will be the first agency to become aware through the alarm systems in their Control Room(s). A sudden rupture or 'big bang', is more likely to be witnessed by a member of the public who may contact one of the emergency services. Initial contact therefore may be via the police or fire and rescue control room.

Safety Advice

3.3 Any person discovering an incident should notify the Police immediately and should observe the following precautions:

Do's

- Do** ensure the Police are informed
- Do** keep people away from the area
- Do** extinguish all forms of naked flame
- Do** keep motor vehicles back from the site
- Do** switch off all electrical and electronic equipment (unless intrinsically safe)
- Do** wait for the Emergency services or Pipeline Company representative to arrive at the site.

Don'ts

- Don't** attempt to remedy the situation,
- Don't** close valves
- Don't** enter the immediate area – risk of a gas/explosion hazard
- Don't** smoke or use torches, radios or any equipment, which can generate a spark
- Don't** start or use any engine or motor vehicle.

Safety Advice for First Responders

3.4 First officer on scene;

- Must approach location with caution from upwind
- Seek advice on safety from pipeline operator employees if they are present,
- Check the predicted forecast. This information should be cascaded to and shared with responders

WARNING: Escaping gas may produce harmful noise levels, responders must be made aware that standard issue hearing protection may not afford adequate protection.

If unignited

- Ensure there is a strict NO SMOKING, NO NAKED LIGHTS rule within the area of release;
- Ensure all potential ignition sources (including vehicles, pagers, radios, mobile phones) are kept well clear of the incident
- Plant should be diesel driven and if it is used in an area where a potential gas cloud could arise, it should be equipped with overrun protection and spark arrestors
- Electrical equipment should be flameproof, or otherwise certified as suitable for use in potentially explosive atmospheres
- Mobile phones, radio communications systems etc, may not be used where a gas cloud is potentially present, unless intrinsically safe
- Unless otherwise advised by the pipeline operator, safe distances should be based on the maximum thermal hazard range for the individual pipeline.

Section 3 Plan Activation

- If emergency control and or rendezvous points are to be established it is suggested these initially be located at a distance double the maximum thermal hazard range; this may be amended when the pipeline operator has conducted an on-site risk assessment.

Combined & Co-ordinated Response

- 3.5 The response to a MAHP emergency must be based upon existing generic procedures and training. Fundamental to the successful control and co-ordination of a major emergency is the liaison of all the emergency and support services. A recognised and nationally agreed structure has been adopted, based upon three levels of command; this can be applied to each organisation. These are known as **operational, tactical and strategic**.

In using this structure, the emergency and support services will be in a position to optimise communications with each other and clearly understand each others' functions and authority, as well as ensuring all parties clearly understand their own role in the combined response. For further information please consult the Tayside Strategic Co-ordinating Group emergency response plan.

The aim of a combined and co-ordinated response is as follows;

- Preserve life and remove casualties for medical care
- Evacuate members of the public from any area at risk
- Protect property
- Safeguard the environment
- Reassure the public by issuing appropriate information.

Communications

- 3.6 Each service and agency should ensure a comprehensive log of events is maintained. All communications operators must maintain logs of action taken, together with details of officers involved and their time of deployment. Records must be timed, dated and individuals must clearly identify themselves.

Intrinsically Safe Communications

- 3.6.1 Although the emergency services have communications equipment for dealing with normal emergencies, this equipment is not intrinsically safe and must not therefore be used in a potentially explosive atmosphere. Only limited supplies of intrinsically safe equipment are available for use by the Fire & Rescue Service.

Normal VHF radio systems may be used safely out with the outer cordon and it should be possible to utilise these networks throughout Tayside without experiencing "blind spots". However in the event of operating difficulties with communications systems, voice and data, Tayside Police should be contacted immediately for assistance. In addition, Angus Council can also mobilise the Raynet organisation when considered necessary to provide ad hoc tactical communications in remote geographic areas by its members, who are licensed radio amateurs.

Section 3 Plan Activation

Shelter and Evacuation

3.7 In many cases involving flammable hazards the instinctive response to evacuate may not be the appropriate action to take. This is because in certain instances such action might expose those evacuated to unnecessary danger. It is the responsibility of Tayside Police in conjunction with the other Emergency services and agencies providing safety advice, to make the decision on whether to advise the public to stay-put and take shelter, or to evacuate.

Shelter

3.7.1 The purpose of shelter is to protect people from the consequences of a major emergency; for example in the release of a toxic substance. National guidelines state that the public should be encouraged to shelter unless there is a clear and obvious danger to life – using the following advice:



Go or stay in-doors, close all windows and doors, move to rooms furthest away from the incident site. Switch off all fans and ventilation

systems, as these could draw fumes into the house. Listen to the local media who will broadcast news and advice. Do not telephone the Police and Emergency services for advice, in order that lines can be kept clear, unless of course, a separate home emergency occurs or someone is being seriously affected by the incident. The public will be advised by the media and the police when the incident has been rendered safe. Information will also be posted to websites of responding agencies and the council (<http://www.angus.gov.uk>

Evacuation

3.7.2 The police incident officer will consult with the incident officers of the other emergency services, specialists and management of the pipeline operator, prior to making the decision to evacuate. If it is decided that evacuation is the best means of protecting the public from the effects of the incident, then the police will co-ordinate the evacuation in liaison with the local authority.

In making the decision to evacuate the following will have been considered;

- The possibility of risk of injury to residents and/or destruction or severe damage to property
- The removal of residents from the threatened area without there being unnecessary risk
- Whether the nature of the hazard is such that sufficient time is available to move the number of people involved.

Should evacuation be necessary, there may be a requirement for temporary accommodation and the local authority will set up a support centre.

Vulnerable People

3.7.3 During an evacuation, additional consideration must be given to the evacuation of vulnerable people as they may require additional assistance, such as residents who are elderly or who suffer from some kind of physical or mental disability. As part of generic emergency planning, arrangements are in place to identify potentially vulnerable people in the community. For every section of pipeline detailed in Section 4, the maximum thermal hazard range has been assessed and any such sites identified, with additional details provided for the attention of Category 1 responders.

Section 3 Plan Activation

Support Centres

- 3.7.4 Where there is a need to evacuate people the council will provide transport and a safe place for evacuees to go i.e. a support centre. This will be activated via e Civil Contingencies. It is recognised that during a sudden onset emergency the public may be evacuated to any site deemed necessary by the emergency services. The council will provide support in that area for a short-term evacuation and/or arrange transport to a designated rest centre if the emergency is expected to be prolonged. Further information can be found in the Civil Contingencies Angus, Emergency Plan. Available on the Angus Council website.

Public Information and Media Arrangements

- 3.8 All services should be prepared to receive direct enquiries and attention from the press and media; however the police will take the initial lead in media handling as part of their role in managing the co-ordination of the response.

The pipeline operator will need to undertake a full and active role in responding to media and information demands. Personnel liaising with the media, particularly in the area of the incident, must exercise care in relation to their own safety and whenever possible brief media personnel regarding known dangers at the scene.

Working with the Media

- 3.8.1 When it is safe to do so, a media liaison point will be established near the scene, at or beyond the outer cordon, for the reception of media personnel, checks on their identification and briefing arrangements for reporting, filming and photography.

If the emergency is likely to last for a significant duration then a media centre may be established with more substantial facilities for use by the media.

In most situations the police will despatch a spokesperson to the media liaison point/centre. It may be appropriate, at the discretion of the Police Incident Officer, for this function to be undertaken by a representative from another emergency service or agency; such representatives will have received appropriate emergency & media management training.

Public Information

- 3.8.2 There will be a need to provide public information on the nature and extent of the hazards involved. Such information should be generated as a multi-agency media statement and released by a nominated Press Officer. The pipeline operator will also be prepared to make a formal announcement soon after this plan has been activated and will liaise closely with other responding agencies in supporting the multi-agency media statement.

Public Help Lines

- 3.8.3 In order to fulfil demands by the public for information public help lines may be established. The pipeline operator will set up help lines for members of the public. The council will also have help lines set up via accessline

Information will also be available on the council's website under emergency situation - current emergencies. Information will also be available via the media including local radio and TV.

Section 3 Plan Activation

Containment & Recovery

3.9 The fire service, pipeline operating company, contractors and the local authority will attempt to contain and recover any product spill where appropriate to minimise any environmental damage. Any efforts in this regard must be undertaken only where the health and safety of those involved can be assured.

Full details of counter-pollution arrangements are contained in the relevant pipeline operating company emergency procedures

Spill Adjacent to River Crossing

- If feasible, contain the spill to a natural or man made reservoir, natural ground hollow, spaded off dry ditches, or bunded areas
- Recover spilt product with air operated pumps
- All efforts must be made to prevent or minimise any seepage into nearby watercourses
- Booms should be deployed at pre-determined booming areas to collect the product at the riverbank for recovery.

Spill Adjacent to Streams or Burns

- Dam streams by any practicable means.
- Divert water further upstream, or dam and pump it away.
- Remove the product with a skimming device or absorbents.

Spills on Agricultural Land

3.10 Stop up the outlets of field drains or spade off sections of ditches where field drains exist. Recover product using skimming devices and/or sorbent materials.

Product is to be removed by digging dumps in appropriate locations allowing the product to collect.



SECTION 4

Roles & Responsibilities



Section 4 Roles & Responsibilities

Pipeline Operator

- 4.1 Pipeline operating companies will establish safety management systems covering the organisation and arrangements for preventing, controlling and mitigating the consequences of major accidents on major accident hazard pipelines.

Emergency procedures will be included in an emergency plan prepared by each pipeline operator which will dovetail with the local authority emergency plan.

The company emergency procedures are maintained in an up-to-date operational state and revised as necessary to cater for changes to operating procedures. The following documents should be referred to as appropriate when considering an integrated response to any pipeline emergency;

- BP Exploration Forties Pipeline System (FPS) Onshore Pipelines - Major Incident Emergency Procedures
- Shell Expro - Far North Liquid and Gas System (FLAGS) - Onshore Pipeline Emergency Procedures
- National Grid Emergency Plan
- Scotland Gas Networks/ Scotia Gas Networks Emergency Plan.

Angus Council

- 4.2 During a major incident the Local authorities roles and responsibility are;
- Co-ordination of local authority services
 - Support of the emergency services and other agencies involved in the incident
 - Provision of support and services to the wider community
 - To co-ordinate the response, if necessary, of the voluntary organisations.
 - To oversee, in conjunction with the operator, the rehabilitation of the area
 - To coordinate the response, if necessary, of the voluntary organisations

Tayside Police

- 4.3 The roles and responsibilities of the Police encompass the protection of life and property and co-ordination of all responding agencies this may be summarised as follows;

- Saving of life in conjunction with the other emergency services and category 1 responders
- Co-ordination of the emergency services and other response organisations during the emergency phase of the incident
- Collation and dissemination of casualty information
- Protection and preservation of the scene
- The investigation of the incident in conjunction with other investigative bodies
- Identification of the dead on behalf of the Procurator Fiscal who is the principal investigator where fatalities are involved
- Issuing information to the media in consultation with the Procurator Fiscal

Tayside Fire Rescue

- 4.4 The roles & responsibilities of the Fire and Rescue Service are:

- Rescue of trapped casualties
- Preventing further escalation of the incident
- Provide advice to the police in conjunction with the pipeline operators with reference to any hazard assessment.
- Establish the inner cordon and inform all agencies;
- Contact the Meteorological Office and request CHEMET information;
- Liaise with ambulance & pipeline operator regarding safe casualty retrieval
- Consider, in consultation with Police, if evacuation is deemed necessary.
- Responsible for the safety of all personnel within the inner cordon
- Consideration of the effect the incident may have on the environment and the actions to be taken to minimise this.
- Assisting the Police with recovery of bodies

Section 4 Roles & Responsibilities

- Participate in investigations as appropriate and preparing reports and evidence for inquiries
- Standby during non-emergency recovery phase to ensure continued safety at and surrounding the site if necessary

Scottish Ambulance Service

4.5 In responding to a pipeline incident, the Ambulance Service responsibilities may be summarised as follows:

- Alert and mobilise hospitals, medical services and voluntary first aid organisations;
- Liaise with other emergency services engaged at the scene, assume and maintain overall responsibility for medical staff onsite.
- Preservation of life, triage, treat and transport to designated receiving hospital
- Establish casualty clearing station & ambulance loading point in consultation with the police and fire & rescue service

Despatch a special operational response team to deal with issues of decontamination of casualties.

NHS Tayside

4.6 The following hospitals have been identified as designated receiving hospitals;

- **Ninewells Hospital** covering the Central and Northern areas of Tayside including the adjacent area of Fife and the adjacent southern area of Grampian.
- **Perth Royal Infirmary** covering the City of Perth and the Western areas of Tayside.

Public Health Medicine in Chemical Incidents

4.6.1 The role of the Public Health Medicine Service during an incident involving

chemicals or the release of ionising radiation is as follows;

- Advising emergency services on the health impact of the chemicals released into the environment
- Disseminating information in collaboration with emergency services and other agencies to the public about the health effects of the chemical
- Disseminating information on the chemical to health professionals
- Conducting any appropriate epidemiological studies into the short, medium or long term effects on health of the chemicals in collaboration with other agencies
 - Liaison with the Scottish Government and Health Protection Scotland regarding aspects of the chemical.

Scottish Environment Protection Agency (SEPA)

4.7 In the event of a major accident hazard pipeline failure where potentially contaminating materials are released it is the responsibility of the Scottish Environment Protection Agency, (SEPA) to ensure the containment and regulated appropriate disposal of contaminated material such as soil and absorbent materials. SEPA also have a responsibility for the collection of evidence in the event of a report being made to the Procurator Fiscal.

It will be the responsibility of Angus Councils, Civil Contingencies to contact SEPA.

When notified SEPA will send a liaison officer to the scene of the incident. This would probably be the Duty Standby Officer. The SEPA Divisional Manager or a senior member of staff would also represent SEPA at the Council Emergency Centre (CEC).

Section 4 Roles & Responsibilities

Depending on the scale of the incident, the type of material released it may also be appropriate for the SEPA Specialist Environmental Protection Officers to be involved. This would generally occur when they had some specialist advice to give in relation to a specific process in regulating on a routine basis.

The SEPA hydrology department can offer estimates of pollutant (normally oil) travel times in watercourses so that the best deployment of recovery resources can be achieved.

The disposal of contaminated material is the responsibility of the relevant pipeline operator. SEPA can also advise on sites capable of handling large volumes of contaminated materials. There are few facilities available, which SEPA considers suitable for the disposal of contaminated material, which highlights a problem in the short, and long term storage/disposal of contaminated material.

With their expertise in ground and surface water protection and as the waste regulation authority for Scotland SEPA can offer advice regarding the suitability of temporary storage sites during and shortly after a pipeline incident.

Scottish Water

- 4.8 In the event of a spill of fluid or gaseous product from a major accident hazard pipeline in Angus the call centre must be notified as quickly as possible. The call centre will then contact operational staff who will carry out appropriate actions.

It will normally be the responsibility of Angus Council's Civil Contingencies to inform Scottish Water as soon as possible following notification of the incident.

It is important to provide the location of the fractured pipeline with an eight-figure national grid reference number and the contact name and telephone number of the pipeline operator.

Scottish Water is responsible for water supply and drainage in all areas of Angus.

An escape of fluid or gas from a fractured pipeline may be directly discharging upstream of the abstraction point for the public water supply. When the Scottish Water is notified of the incident the water intake will immediately shut down to safeguard the integrity of the supply. Scottish Water contingency plans will then be implemented to maintain the water supply to the public.

A pipeline fracture may cause other instances of discharge into watercourses. It is possible that a combination of gas and rain may pollute watercourses well away from the pipeline fracture. It is the responsibility of Scottish Water to safeguard the water supply and decide what course of action to take.

Scottish & Southern Energy Group

- 4.9 Tayside Police and the pipeline operators can contact the Scottish Hydro Electric Network Services Central Control Centre using their ex-directory telephone numbers

In the event of a major accident hazard pipeline fracture adjacent to a Scottish Hydro Electric power line Tayside Police will contact the Central Control Room requesting an immediate shut down of power on nearby transmission lines to reduce the risk of ignition from sparks.

Tayside Police will provide the Scottish Hydro Electric Network Services Control Room with the exact location of the fractured pipeline to ensure that the relevant power lines can be shut down.

Section 4 Roles & Responsibilities

Scottish Natural Heritage (SNH)

4.10 In the event of a major accident hazard pipeline incident SNH will be notified by the Council's Civil Contingencies and provided with the exact location of the fractured pipeline.

SNH will liaise closely with the pipeline operator and the local authority to agree suitable response actions to safeguard the environment. If a Council Emergency Centre is established in Angus House, Orchardbank, Forfar, an SNH liaison Officer may be requested to attend to assist in the co-ordination of containment and clean-up actions.

Voluntary Organisations

4.11 The council's emergency plan contains a brief description of the roles and responsibilities of the voluntary organisations.

All voluntary organisations will operate according to their internal guidelines at the request of and under the direction of the emergency services or Angus Council.

Tayside SCG Voluntary Agencies Skills Booklet contains contact details and lists of skills base and resources of additional organisations who may be contacted for advice or assistance.

Scientific & Technical Advice Cell (STAC)

4.12 Emergency co-ordinating groups often require expert advice on a range of public health, environmental, scientific and technical issues in order to deal effectively with the immediate and longer term consequences of an emergency. There is a need to ensure that this advice is co-ordinated.

The STAC operates as an advisory group at tactical level. Its focus is to provide practical advice on public health, environmental,

scientific and technical issues to those responsible for mounting and co-ordinating the response to an emergency. It will therefore advise on strategy to any strategic level co-ordinating group and on matters of detail to other tactical level groups.

The chair of STAC will be the Consultant in Public Health Medicine (CD/EH).

The aim of the STAC is as far as is practicable to provide emergency co-ordinating groups with authoritative information and agreed advice on the risk assessment of health and environmental hazards, by;

- bringing together or arranging contact with all the relevant specialist advisers through a single group
- providing agreed recommendations on risk management action
- providing co-ordinated risk communication messages and
- confining the main discussion on such issues to within the STAC itself (rather than at the main co-ordinating group meetings).

The STAC should be activated by the lead responder through the SCGs generic procedures for obtaining advice on public health or environmental issues. Where other arrangements exist for specific types of emergency, consideration should be given to using the generic arrangements for rapid activation of a core STAC as the initial step. Preparing Scotland Guidance on providing public health, environment, scientific and technical advice to emergency co-ordinating groups in Scotland "STAC Guidance"



Section 4 Roles & Responsibilities

Strategic Co-ordinating Group (SCG)

4.13 The Tayside SCG is one of 8 multi agency Strategic Co-ordinating Groups in Scotland based on the eight police force areas.

The purpose of the SCG is to establish and maintain a formal partnership as an aid to planning for the effective management of response to and recovery from emergencies and to ensure that the partners in its continuing development and implementation are fully repaired to respond to emergencies at all times.

During a large scale incident involving one or more of the local authority areas the, SCG may be activated to co-ordinate the response across the Tayside area at either or both tactical and strategic level

Wherever possible, any statements for release to the press and broadcast media will be agreed on a tripartite basis before issue.

The Public Relations staff of Angus Council will be responsible for the following:;

- Dealing with the media regarding the provision of public safety information
- General information regarding the incident
- The management of premises for press conference purposes.

Meteorological Information

4.14 The Chemical Meteorology Scheme (CHEMET) which is an emergency forecasting service may be invoked in the course of any pipeline emergency where accurate and up to date meteorological information particularly wind direction and speed is required to assist the emergency services and other agencies to formulate appropriate response measures.

When invoked by either the Fire Service or the Police, this will involve the immediate issue by the Met. Office of a localised report and forecast of weather conditions including wind direction and speed for the area affected followed by a more detailed forecast approximately 20 minutes later. Further meteorological data will be supplied according to the duration of the incident.

Media Statements/Provision of Public Information

4.15 Liaison will be established between the Police, the pipeline operator and the local authority regarding any statements to the media.



Section 4 Roles & Responsibilities

Prompt Cards

4.16.1 FIRST OFFICER AT THE SCENE FROM ANY OF THE EMERGENCY SERVICES		
	Actions	✓
Survey	The scene.	
Assess	The situation, check safety.	
Disseminate	The following information to the control room.	
Casualties	Approximate numbers dead, injured and uninjured.	
Hazards	Present and potential.	
Access	Best access routes for emergency vehicles.	
Location	The exact location of the incident.	
Emergency	Emergency services present and required.	
Type	Incident numbers of persons and properties involved.	
Start Log	Log all actions from initial arrival or contact. This log must be kept up to date and any relevant issues, actions or decisions made must be noted.	
<p>Emergency services will need to consider both the emergency planning distance and, the much greater, maximum thermal hazard range when deciding evacuation procedures and cordons. If emergency control rendezvous points are to be established it is suggested these initially be located at a distance double the maximum thermal hazard range; this may be amended when the pipeline operator has conducted a dynamic risk assessment.</p>		

Section 4

Roles & Responsibilities

4.16.2 PROMPT CARD 5: ANGUS COUNCIL	
This prompt card is not prescriptive nor does it replace any existing processes or procedures.	
Angus Council will establish a Council Emergency Centre or a Co-ordinating Group depending on the scale of the situation.	
Responsibilities/Actions	
PLEASE NOTE	No attempt should be made to approach the incident area without contacting the pipeline operator for safety advice. Prior to the arrival of the pipeline operator it is recommended that a 500m exclusion zone is put in place
	Despatching a liaison officer to the scene where possible (500m exclusion zone.)
	Set up emergency support centres where necessary.
	In consultation with the pipeline operator, advising the senior police officer of vulnerable premises.
	Assisting with the arrangements for dealing with the media.
	Arranging feeding of response staff and evacuees.
	Arranging transport including 4 WD vehicles, coaches, mini buses etc.
	Providing and placing traffic diversion and control signs. Providing portable floodlighting.
	Environmental monitoring - Deploying counter-pollution resources for containment and recovery purposes.
Civil Contingencies Team	
	COMMENCE PERSONAL LOG. PROVIDE UP TO DATE SITUATION REPORTS TO PR, ACCESSLINE, SENIOR MANAGEMENT TEAM. VIA AIMS OR COUNCIL INTRANET, FAX, EMAIL. CONFIRM THAT THIS PLAN HAS BEEN ACTIVATED.
	Confirm and verify the scope, scale, nature and location of the incident.
	Brief the Chief Executive as to the circumstances and status of the event. Confirm with Chief Executive arrangements for briefing elected members. Discuss with the Chief Executive activation of the Council Emergency Centre.
	Notify Angus Council PR Team. Identify any vulnerable people/premises.
	Establish and maintain liaison links with all lead agencies and authorities engaged in the containment and resolution of the event.
	Contact call and brief appropriate staff for incident management functions Consider the need to place voluntary organisations and other agencies on standby.
	Brief local authority incident and liaison officers – notify adjacent local authorities that the event has occurred
	Ensure effective co-ordination of the response of Angus Council at “strategic”, “tactical” and “operational” levels.
	Mobile telephones ARE NOT 'intrinsically safe' and must not be used near to the incident site. All radio's/ communication devices must be confirmed as being intrinsically safe prior to there use within the 500m exclusion zone including AIRWAVE



Section 4 Roles & Responsibilities

4.16.3 PROMPT CARD 2: TAYSIDE POLICE		
This prompt card is not prescriptive nor does it replace any existing processes or procedures.		
Immediately Tayside Police are notified of a pipeline incident they will carry out the following actions: In no particular order.		
Actions		ESV
PLEASE NOTE	No attempt should be made to approach the incident area without contacting the pipeline operator for safety advice. Prior to the arrival of the pipeline operator it is recommended that a 500m exclusion zone is put in place.	
First officer on the scene (500m)	<ul style="list-style-type: none"> • SAD CHALETS (please see above) Ensure when deciding approach routes that these are given upwind of the incident site. • Undertake co-ordinating role and traffic management duties. 	
Notify	<ul style="list-style-type: none"> • fire, ambulance service, pipeline owner, local authority via duty officer pager. 	
Identify & establish	<ul style="list-style-type: none"> • initial rendezvous point, • forward control point, • incident control point (these should be initially situated at least 500m away from the incident area), • a media liaison point and coordinate the multi-agency media, response in conjunction with the pipeline owner, as per the Tayside SCG Joint Media Plan. 	
Consider the need for;	<ul style="list-style-type: none"> • evacuation in close liaison with fire and pipeline owner and warning & informing the public via local radio and television. • the need for a Casualty Bureau. 	
Consider in conjunction	<ul style="list-style-type: none"> • with other emergency, services, local authority, and pipeline owner the declaration of a major incident/emergency. 	
If relevant notify;	Network Rail, Utilities and owners of adjacent, pipelines (as required), Inform the Health and Safety Executive (as required), Air Traffic Control (Civil and Military local airports and, if necessary, request a temporary air exclusion.	
	Consideration should also be given to any requirement for the evacuation of livestock in consultation with the SSPCA and other animal welfare agencies.	
MAIN RISK	EXPLOSION , CONTAMINATION , POLLUTION.	
Main Objectives	<p>The saving of life in conjunction with the other emergency services. Call out or place essential services on standby. Co-ordination of the emergency services and other response organisations During the emergency phase of the incident. The collation and dissemination of casualty information. The protection and preservation of the scene. The investigation of the incident in conjunction with other investigative bodies Identification of the dead on behalf of the Procurator Fiscal. Issuing information to the media in consultation with the Procurator Fiscal.</p>	
Mobile telephones ARE NOT 'intrinsically safe' and must not be used near to the incident site. All radio's/ communication devices must be confirmed as being intrinsically safe prior to there use within the 00m exclusion zone including AIRWAVE		

Section 4 Roles & Responsibilities

4.16.4 CARD 3: TAYSIDE FIRE & RESCUE		
This prompt card is not prescriptive nor does it replace any existing processes or procedures.		
For confirmed incidents Tayside Fire and Rescue will carry out the following; In no particular order.		
	Actions	esv
PLEASE NOTE	No attempt should be made to approach the incident area without contacting the pipeline operator for safety advice. Prior to the arrival of the pipeline operator it is recommended that a 500m exclusion zone is put in place.	
First Officer on Scene;	SAD CHALETS (please see above) Ensure when deciding approach routes that these are located upwind of the incident site.	
Carry out	a dynamic risk assessment in conjunction with the pipeline operator.	
Mobilise	pre-determined attendance to the scene including the control unit, emergency support unit, gas detection and thermal imaging camera equipment, and put foam carrier on stand-by advising caution on approach (upwind) .	
Activate	major emergency procedures in response to an industrial accident.	
Access	chem-safe and chem-data services, which provide hard copy data sets on safe handling, fire fighting and operational response.	
Establish	the inner cordon and inform all agencies in consultation with the police and pipeline operator(upwind and out with the initial 500m exclusion zone) Contact the Meteorological Office and request CHEMET information.	
Liaise with	the ambulance service & police, pipeline operator regarding safe casualty retrieval.	
Consider	if evacuation is necessary in consultation with Police and pipeline owners depending on the scale of the incident and in conjunction with other emergency, services, local authority, and pipeline owner the declaration of a major incident/emergency.	
Direct	fire crews to remain at the rendezvous point(s) until clearance is given to proceed to the incident site.	
Participate	In investigations as appropriate and preparing reports and evidence for inquiries.	
Standby	During non-emergency recovery phase to ensure continued safety at and surrounding the scene if necessary.	
Main Risk	EXPLOSION * CONTAMINATION * POLLUTION - Any ignited release must not be extinguished unless advised to by the pipeline operator.	
Main Objectives	Rescue of trapped casualties Preventing further escalations of the incident by tackling fires, dealing with released chemicals and other hazardous situations Information gathering and hazard assessment to give advice The safety of all personnel within the inner cordon To consider the effect the incident may have on the environment and action to be taken to minimise this. Assisting Police with the recovery of bodies.	
Mobile telephones ARE NOT 'intrinsically safe' and must not be used near to the Incident Site. All radio's/ communication devices must be confirmed as being intrinsically safe prior to their use within the 500m exclusion zone including AIRWAVE.		



Section 4 Roles & Responsibilities

4.16.5 CARD 3: SCOTTISH AMBULANCE SERVICE		
This prompt card is not prescriptive nor does it replace any existing processes or procedures.		
For confirmed incidents Scottish Ambulance Service will carry out the following; In no particular order		
	Actions	ES✓
PLEASE NOTE	No attempt should be made to approach the incident area without contacting the pipeline operator for safety advice. Prior to the arrival of the pipeline operator it is recommended that a 500m exclusion zone is put in place.	
First Officer on Scene	SAD CHALETS (please see above) Ensure when deciding approach routes that these are given upwind of the incident site.	
Carry out	a dynamic risk assessment in conjunction with the other emergency services and the pipeline operator	
Mobilise;	the Special Operations Response Team/ Decontamination Unit advising caution on approach. Upwind from incident area.	
Notify	Police, Fire & Designated Hospitals.	
Activate	when advised by the Incident Officer at the scene, inform appropriate A&E Departments to 'activate' their major incident plan and if it is deemed necessary prepare to mobilise their Medical Incident Officer (MIO) and the Mobile Medical Team (MMT) to the incident location to assist with the care, management and hospitalisation of casualties.	
Ensure	ambulance control is aware of any special information re the safe approach to the incident i.e. upwind at least 500m from incident site.	
Deploy	Medical Incident Officer and additional resources to Rendezvous point (as advised by Fire Service).	
Establish	Casualty Clearing Station & Ambulance Loading Point.	
Complete	risk assessment matrix (subsequent to METHANE) report (specific hazards/ updates.	
Liaise	with Fire Service regarding the safety of personnel.	
Consider	depending on the scale of the incident and in conjunction with other emergency services, local authority, and pipeline owner the declaration of a major incident/emergency.	
Alerting	and co-ordinating the work of the Voluntary Aid Societies acting in support of the ambulance service at the incident site.	
Main Risk	EXPLOSION * CONTAMINATION * POLLUTION	
Mobile telephones ARE NOT 'intrinsically safe' and must not be used near to the Incident Site. All radio's/ communication devices must be confirmed as being intrinsically safe prior to their use within the 500m exclusion zone including AIRWAVE.		

Section 4 Roles & Responsibilities

4.16.6 CARD 4: PIPELINE OWNERS		
This prompt card is not prescriptive nor does it replace any existing processes or procedures.		
The Pipeline Owner carry the overall responsibility for all their onshore pipelines.		
	Responsibilities/Actions	B✓
	<p>The companies shall ensure that these pipelines are operated with regard to all relevant safety regulations, that all necessary maintenance is regularly and safely carried out and that all rights of way are properly maintained. In the event of an incident the operator will carryout the following;</p>	
	<p>The pipeline operator will ensure that product flow into and out of the relevant pipelines has been isolated through shut-off valves, automatic and manual, and other emergency control arrangements.</p>	
	<p>In an emergency the Operators Operations Control Centre will initiate any necessary actions for shutting down/isolating the affected pipeline and make the required call-outs and any notifications detailed in their emergency procedures. This would include the On-Call Co-ordinator responsible for the operational response to an emergency incident, the Emergency services, the local authority and other appropriate statutory agencies.</p>	
	<p>The companies have designated Pipeline Emergency Response Officers (P.E.R.O.) or Company Incident Controllers (C.I.C.) based at strategic points along the route. On average a company representative could be deployed to the locus within 1-2 hours of being notified by the Police.</p> <p>The P.E.R.O/C.I.C. will be identifiable by a high visibility tabard and will be available to give expert advice/opinion as necessary. The pipeline operator will be responsible for passing all available information to the Fire Brigade HQ as soon as possible.</p>	
PERO/CIC	Actions	
•	assess the incident status and report to the relevant company control room giving wind direction and safe approach route.	
•	advising the public authorities at site on safety and technical aspects.	
•	contact the informant or senior police officer on site.	
•	maintaining communication with the company representative at the scene of the incident.	
•	setting up an emergency control group.	
•	arranging for labour and materials for containment and clean-up; advise regarding safety, containment and clean up measure.	
•	supervise company/contractor personnel in containment/clean-up operation, such as temporary pipe clamp installation, booming of rivers, damming burns, setting up temporary transfer pumps, setting up automatic explosi-meter monitoring system around incident site and loading of tankers with any spilt hydrocarbon liquid.	
	repairing the pipeline & re-instating the area.	

Section 4 Roles & Responsibilities

Assistance that could be required by pipeline operators

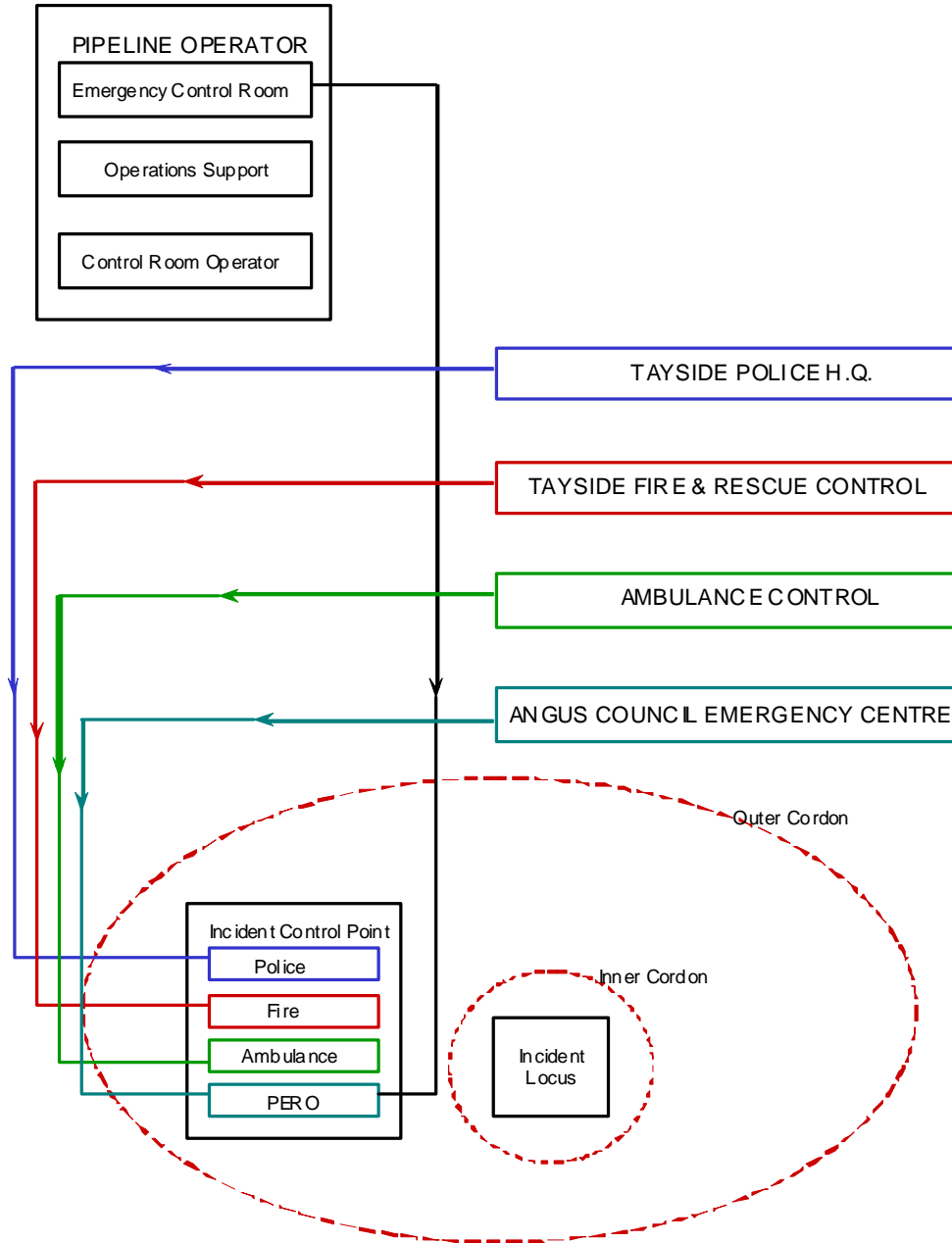
POTENTIAL ASSISTANCE REQUIREMENTS						
Requirements	Fire	Police	Ambulance	Local Authority	SEPA	Public Health
Hazard Zone Management	<input checked="" type="checkbox"/>					
Cordons	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Traffic Management/ Signage		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Rescue/Evacuation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Warning & Informing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Onsite Medical Support			<input checked="" type="checkbox"/>			
Designation of RVP		<input checked="" type="checkbox"/>				
Forward Control Point	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Public Information	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Public Health Information						<input checked="" type="checkbox"/>
Transport for Evacuees		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Support Centres				<input checked="" type="checkbox"/>		
Community Support				<input checked="" type="checkbox"/>		
Environmental Issues				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Inspection of Infrastructure				<input checked="" type="checkbox"/>		
Plant, Equipment, Materials				<input checked="" type="checkbox"/>		
Council Emergency Centre				<input checked="" type="checkbox"/>		

Section 4 Roles & Responsibilities

4.16.7 PROMPT CARD 6: NHS TAYSIDE (NON AMBULANCE)		
This prompt card is not prescriptive nor does it replace any existing processes or procedures.		
PLEASE NOTE	No attempt should be made to approach the incident area without contacting the pipeline operator for safety advice. Prior to the arrival of the pipeline operator it is recommended that a 500m exclusion zone is put in place.	✓
	Responsibilities/Actions	
	On being notified of the incident NHS Tayside will: (In no particular order	
	Advise the designated receiving hospitals and where necessary the supporting hospitals i.e.: Ninewells Hospital Perth Royal Infirmary or other identified site as determined by NHS TAYSIDE.	
	Implement NHS Major Emergency Procedures for the reception of casualties;	
	Despatch a Site Medical Officer and Site Medical Team to the scene of the incident in accordance with the grid reference or locus advised by the police.	
	Alert key personnel, including the hospital Control Team.	
	Prepare a statement for the media in conjunction with the police and pipeline operators.	
	Prepare public health information for warning and informing, in conjunction with police, pipeline operators and other key organisation media teams as per the Tayside SCG media guidance.	
	Call-out support services, such as pharmacy, laboratory, blood supplies.	
	Complete documentation on casualties on arrival at hospital.	
	Receive and treat casualties.	
	Put decontamination team on standby. Depending on the scale of the incident and the type of material released it may be necessary for decontamination processes to be carried out prior to entry into the hospital especially in the event of self presenters.	
	Reception of relatives and friends of casualties at hospital.	
	Liaise with the Voluntary Aid Services, such as WRVS; Salvation Army.	
	Hospital security.	
	Provision of additional telephones, radios, fax equipment.	
	Provision of information and helpline.	
	Mobile telephones ARE NOT 'intrinsically safe' and must not be used near to the Incident Site. All radio's/ communication devices must be confirmed as being intrinsically safe prior to their use within the 500m exclusion zone including AIRWAVE.	

Section 4 Roles & Responsibilities

4.17 EMERGENCY RESPONSE ORGANISATION





SECTION 5

HSE SCHEDULE OF MAHP – ANGUS



Section 5 HSE SCHEDULE OF MAHP ANGUS

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SECTION 6

MAHP DETAILS AND ROUTES



Section 6 MAHP DETAILS

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SECTION 6 - Appendix 1 National Grid Pipelines

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SECTION 6 - Appendix 3 Shell Pipeline

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SECTION 7

CO-ORDINATION OF MAHP INCIDENT



Co-ordination

7.1 In the event of a major pipeline Incident a large number of council staff and outside agencies would be involved in the co-ordination of the response measures.

Under these circumstances Angus Council's Emergency Centre in Angus House, Orchardbank Business Park, Forfar would be activated.

The operational aspects would be divided into functional groups with representation, as appropriate depending on the circumstances as follows;

CO-ORDINATING GROUP

Emergency Co-ordinator
Council Emergency Planning Officer
Council Media Relations Officer
Scottish Government - when appropriate
Operator's Public Relations Officer - when appropriate

MANAGEMENT GROUP

Council Pollution Officer
Pipeline Operator's Representative
Police Liaison Officer - when appropriate
Fire Service Liaison Officer - when appropriate
Ambulance Liaison Officer - when appropriate

ENVIRONMENTAL/TECHNICAL GROUP

Pipeline Company's Technical Officer
Environmental Health Officer/s
Roads Dept Officer - when appropriate
Tayside Contracts Officer - when appropriate
Clean-up Contractor's Rep - when appropriate
Public Health Consultant - when appropriate
Public Analyst's Rep - when appropriate
SEPA Representative
SNH Representative - when appropriate
SW Representative - when appropriate
Representatives from Wildlife Interests – when appropriate.

WELFARE GROUP

Social Work Officer/s
Housing Officer/s
Education Officer - when appropriate
Voluntary Agencies Rep - when appropriate.

SUPPORT TEAM

Emergency Centre Manager
Assistant Emergency Centre Manager
Map/Board/Display Assistant
Word Processor Operators
IT Logging System Operators
Clerical staff
Switchboard Operator - when appropriate
Radio Operator - when appropriate.

The **Co-ordinating, Management, Environmental/Technical & Welfare Groups** would be based in the designated training rooms along with key Support staff. A Call Centre/Helpline would be established in the accessline area.



CIVIL
CONTINGENCIES

ANGUS

SECTION 8

ENVIRONMENTAL SENSITIVITY



SECTION 8 Environmental Sensitivity.

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SECTION 9

PLAN MAINTENANCE GLOSSARY AND ABBREVIATIONS



Assessment

- 9.1 To ensure that the plan will prove to be adequate in the event of a major incident, checking and testing of various components of the plan will be carried out following its publication. The plan will be reviewed after any incident or exercise in addition to annual review to ensure that it fulfils its objectives. Following an incident investigations and debriefs will be held to ensure that all lessons identified and learnt will be used to inform this plan.

Reviewing the Plan

- 9.2 All persons and organisations who are party or a recipient of the plan should ensure that Angus Council Civil Contingency Team are informed of any changes to their roles and responsibilities, organisation or contact telephone numbers, which will affect the contents of the Plan. Angus Council Civil Contingencies will annually review the plan as a whole. If appropriate any amendments will be issued.

Once the plan has been agreed by all organisations concerned, in-house or joint training will be undertaken.

Plan Validation

- 9.3 Records of training and exercises held will be maintained by Angus Council employee development team. Following training the efficiency and effectiveness of the plan will be validated through exercise. The type of exercise will be agreed by all parties in advance. There is a requirement under the Pipeline Safety Regulations for local authorities and pipeline owners to test their on and offsite plans every 3 years

Post Incident Investigation

- 9.3 Under the Health & Safety at Work Act 1974 as amended, it is the duty of operators to investigate all incidents and accidents that occur on their pipelines. This will provide information which can be used to prevent a re-occurrence by highlighting any problems or deficiencies in procedures or training.

Following any emergency this procedure for investigation would be implemented as soon as possible, but depending on the severity of the damage caused, it may be a protracted task.

De-Brief

- 9.5 It is essential that all agencies involved in the incident are involved in the debrief phase. All responding agencies will debrief their personnel and then feed that information to a multiagency debrief. This will be used to revise amend and update this Plan and organisation specific procedures.

<p>Boiling Liquid Expanding Vapour Explosion (BLEVE)</p>	<p>This may occur if a pipeline carrying gas in liquid form is engulfed by fire. If a section of the pipeline is isolated, the pressure may rise as the liquid boils. If the pipe wall weakens due to heat and ruptures then the pipeline content will be explosively released; if the fluid is flammable, instantaneous ignition occurs, producing a fireball.</p>
<p>Building Proximity Distance (BPD)</p>	<p>The distance from the pipeline within which it is recommended that there are no occupied buildings. It is assumed that no occupied development will be allowed upon the easement - the easement or wayleave being the land over which the pipeline operator has contractual control. The BPD may be related to the pipeline maximum allowable operating pressure, pipeline diameter, pipe wall thickness (in suburban areas) and the result of a safety evaluation.</p>
<p>Consultation Distance (CD)</p>	<p>Distance notified to the local planning authority by the HSE and expressed as a distance either side of a pipeline for planning purposes.</p>
<p>Dangerous Dose</p>	<p>The result of heat, toxic gas or vapour, or explosive overpressure which gives rise to all of the following effects:</p> <ul style="list-style-type: none"> a. substantial fraction of the affected population requiring medical attention b. some people seriously injured c. some susceptible people may be killed.
<p>Design Factor (f)</p>	<p>As with most engineering systems a factor of safety is applied to pipelines - this is known as the design factor - and may have a significant contribution when deciding on the route of a pipeline. The design factor is the relationship between the maximum stress allowable at a particular location and the specified minimum yield strength of a pipe material.</p>
<p>Fireball</p>	<p>The burning of a flammable gas or vapour cloud, the bulk of which is initially over-rich (i.e. above the Upper Flammable Limit). The buoyancy of the hot combustion products may lift the cloud from the ground, forming a mushroom shaped cloud. Combustion rates are high and the hazard is primarily due to thermal effects.</p>

Flash Fire	The burning of a flammable vapour cloud at very low flame propagation speed. Combustion products are generated at a rate low enough for expansion to take place easily without significant over-pressure ahead of or behind the flame front – the hazard is, therefore, primarily due to thermal effects.
Hazard	The potential to cause harm.
Hazard Range	The distance from the pipeline within which the surrounding population could suffer harm in the event of a release of pipeline fluids following loss of containment. The hazard range may be a function of a variety of factors including the pressure in the pipeline, the nature of the fluid, local topography and weather conditions and the magnitude of failure.
Risk	A function of the probability (or likelihood) of harm actually occurring and the severity of its consequences.
Risk Assessment	The identification of the hazards present and an estimate of the extent of the risks involved, taking into account any precautions that may have been taken or other mitigation measures
Rural Area	An area through which a pipeline passes where the average population density is 2.5 persons per hectare or less.
Suburban Area	An area through which a pipeline passes where the average population density exceeds 2.5 persons per hectare and which may be extensively developed with residential properties, schools, shops, etc.

AIO	Ambulance Incident Officer
BLEVE	Boiling Liquid Expanding Vapour Explosion
BPD	Building Proximity Distance
CAB	Citizens Advice Bureau
CCC	Casualty Clearing Centre
CD	Consultation Distance
CEC	Council Emergency Centre
CHID	Chemical & Hazardous Installations Division
CHEMET	Chemical Meteorology
CIC	Company Incident Controller
COMAH	Control of Major Accident Hazards
EPU	Emergency Planning Unit
FCP	Forward Control Point
FIO	Fire Incident Officer
HSE	Health & Safety Executive
ICP	Incident Control Post
MAHP	Major Accident Hazard Pipeline
MIO	Medical Incident Officer
NGL	Natural Gas Liquids
NHS	National Health Service, Tayside
PERO	Pipeline Emergency Response Officer
PIO	Police Incident Officer
PSI	Pounds per Square Inch
RAYNET	Radio Amateurs Emergency Network
RVP	Rendezvous Point
St. AAA	St. Andrew's Ambulance Association
SAS	Scottish Ambulance Service
SW	Scottish Water
SEPA	Scottish Environment Protection Agency
SSPCA	Scottish Society for the Prevention of cruelty to Animals
TF&R	Tayside Fire and Rescue
TRA	Temporary Restricted Airspace
WRVS	Women's Royal Voluntary Service

Guide to the Pipeline Safety Regulations 1996, HSE Books, 1996 (ISBN 0 7176 1182 5)
Further Guidance on Emergency Plans for Major Accident Hazard Pipelines, HSE Books
1997, (ISBN 0 7176 1393 3)

Maps & Mapping Detail

Due to the perceived security implications associated with the placing of detailed pipeline maps in the public domain, the following, in respect of map provision, availability and security will apply.

Maps will only be available for 'authorised' use by the emergency services and local authorities should the situation demand. Site Operators have access to their own pipeline mapping system and will, in relation to pipeline incident management activities, furnish pipeline mapping data.